

## A New Species of the Genus *Eumunida* (Crustacea, Anomura, Chirostylidae) off Tori-shima in the Western Pacific

By

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The members belonging to the genus *Eumunida* are known to occur with surprising rarity, only eight species having been reported so far (GORDON, 1930). Of these known species seven have been taken from the Indopacific and the remaining one from both the Atlantic and the Pacific. One of the excellent contributors to this group is GORDON (*l. c.*) who treated all the species known at the time of her publication by examining specimens available at the British Museum and the parts of the collections of the Paris, Munich and U. S. National Museums. For classifying the group she paid special attentions to the presence or absence of spine on each side of the fourth thoracic sternite and pad of short densely packed hair on the ventral surface of the cheliped palm, mainly by which the key to all the eight species was given. Subsequent workers added newly obtained data to this genus with geographical distribution, newly noticed characters, etc. (VAN DAM, 1933, 1937; CHACE, 1942; BABA, 1973); however, no additional species have been found since then.

Recently, Dr. Masatsune TAKEDA of the National Science Museum, Tokyo, came across an unusual form of *Eumunida* collected from the south of Japanese mainland in the course of his current study of brachyurans, and sent it to me for identification. On examination it proved to be an undescribed species, here designated as *Eumunida gordonae* n. sp. The type-specimen will be kept in the collection of the National Science Museum, Tokyo (NSMT).

I wish to thank Dr. Masatsune TAKEDA for the opportunity to study on this interesting specimen.

### *Eumunida gordonae* n. sp.

(Fig. 1)

*Holotype.* Female, NSMT-Cr. 4983, off Tori-shima, S of Japanese mainland, ca. 180 m deep, coral-fishing net, coll. S. SUZUKI.

*Description of holotype.* Carapace slightly longer than broad, exclusive of rostrum; dorsal surface rather smooth; anterior half with feebly developed and incomplete transverse striae; more or less distinct but interrupted striae on posterior half. A small spine just behind rostral base instead of  $\alpha$  by GORDON (1930, fig. 5). Three pairs of hepatic spines small and subequal in size. Lateral margin armed with 6 spines

well-developed, diverging posteriorly, and converging from at hindmost (last) marginal spine; greatest breadth measured between last marginal spines.

Rostrum broken at the level of cornea. Inner supraorbital spine normal on left side, measuring about  $2/5$  of remaining carapace length; both outer supraorbital spines damaged.

Second abdominal segment with three transverse ridges, spined pleuron as characterized in genus; following segments smooth, devoid of striae and spines.

Antennal peduncle consisting of 5 segments; proximal first segment only slightly produced on outer distal margin; distal marginal spine of second segment moderately developed; that of third segment strongly produced forwards, ending in middle of

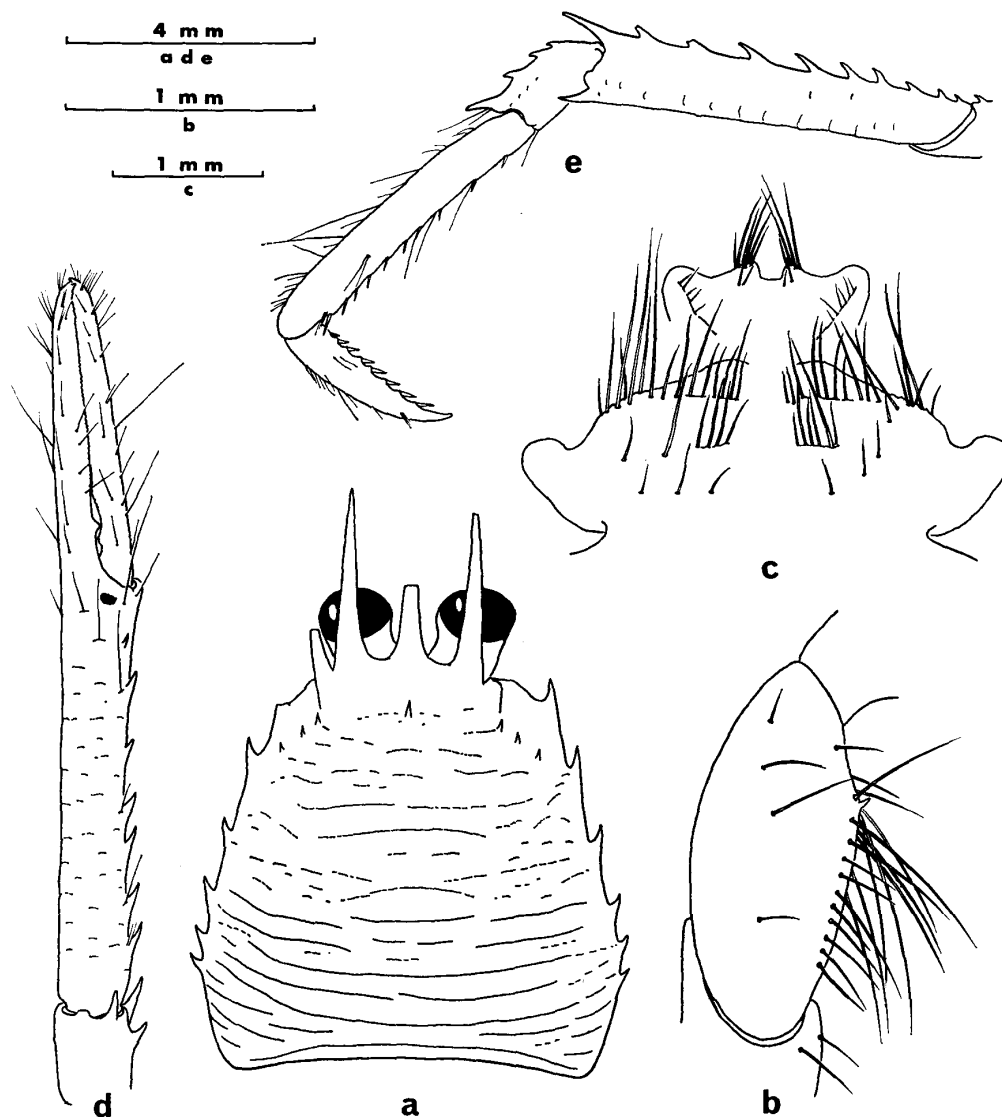


Fig. 1. *Eumunida gordonae* n. sp.; a, carapace, dorsal aspect; b, merus of right third maxilliped; c, anterior part of sternal segments; d, right chela, ventral aspect; e, left first walking leg.

ultimate (5th) segment; antennal scale spiniform, reaching middle of ultimate segment; penultimate segment with a small spine on outer and inner distal margins, of which the inner is distinctly the larger; fifth segment armed with three distal spines of subequal size, one dorsal and two lateral.

Ischium of third maxilliped slightly shorter than merus, with 14 (left) or 15 (right) denticles on cutting edge; merus non-spinose externally, armed internally with a small spine at distal third; carpus unarmed.

Anterior margin of third thoracic sternum roundly produced on either side, with a paired projection bearing long coarse setae instead of median process. Spines absent from following sternum; ventrally two weak striae present, with long coarse setae.

Chelipeds similar to each other, subcylindrical, about four times as long as carapace. Arm strongly spinous, about twice as long as palm; outer margin almost smooth only excepting a distal spine; a longitudinal row of 13 dorsal spines rather small; 8 inner marginals and 10 ventro-inner marginals strongly developed; another row of 6 mid-ventrals of small size. Wrist short, armature simple; two inner marginals of large size, a small dorsal spine rather close to outer margin, and another pronounced ventral spine distally placed. Palm distinctly longer than finger; ventral pad present; dorsal surface with a longitudinal row of 5 (right) or 4 (left) spines placed more or less close to inner margin; 7 inner marginals present slightly ventral in position. Fingers sparsely setose, not gapped; cutting edges almost straightly touched each other with small tubercular teeth; feebly developed gap present at base of right side fingers as in accompanying figure; 5 more pronounced tubercles present at regular intervals on cutting edge of immovable finger.

Walking legs moderately depressed; two legs of right side missing. Merus devoid of long setae; 10 outer (anterior) marginal spines on entire length in first leg, 8 in second, 5 on distal half plus other 5 dorsals in third; inner (posterior) distal marginal spine present through first to third legs and well developed. Four outer marginals of carpus constantly present on first three legs. Propodus distinctly depressed, slightly curving inwards, and sparsely setose; inner margin with 10 movable spinelets in first leg, 9 in second and 8 in third. Dactylus more than half length of propodus; inner margin serrated, with 8 movable spinelets, each arising from serra.

*Measurements of holotype (mm).*

Length of carapace	7.7+
Breadth of carapace	6.6
Length of cheliped (right)	30.1
Length of wrist	2.1
Length of palm	7.2
Breadth of palm	1.2
Length of finger	5.8

*Remarks.* This new species belongs to the B group of GORDON (1930). The only allied species in the group which also possesses the pad of hair on the ventral surface of the cheliped palm is represented by *Eumunida smithi* HENDERSON previously

known from the south of Timor. HENDERSON's species is, however, reported to have the cheliped palm massive and shorter than the fingers (GORDON, *l. c.*). As described above the present new species has the distinctly longer, rather slender and cylindrical palm. These species are also separated from each other by the following respects: 1) The anterior margin of the sternum bearing the third maxilliped is spiniform in a pair in *E. smithi*, while it is not spiny but moderately produced also in a pair with a set of long setae on the ordinary site of the median process in the new species. 2) A small but distinct spine is present just behind the rostral base in *E. gordonae* n. sp.; however, such a spine is absent from *E. smithi*.

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